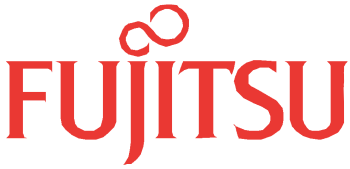

Fujitsu LifeBook

P Series

BIOS Guide

LifeBook P Series Model:

P7230

Document Date: 01/3/2005

Document Part Number: FPC58-1657-01

FUJITSU COMPUTER SYSTEMS CORPORATION

LifeBook P Series Notebook BIOS

BIOS SETUP UTILITY

The BIOS Setup Utility is a program that sets up the operating environment for your notebook. Your BIOS is set at the factory for normal operating conditions, therefore there is no need to set or change the BIOS environment to operate your notebook.

The BIOS Setup Utility configures:

- Device control feature parameters, such as changing I/O addresses and boot devices.
- System Data Security feature parameters, such as passwords.

Entering the BIOS Setup Utility

To enter the BIOS Setup Utility, do the following (or use the TrustedCore Menu, as detailed in the next section):

1. Turn on or restart your notebook.
2. Press [F2] once the Fujitsu logo appears on the screen. This will open the main menu of the BIOS Setup Utility with the current settings displayed.
3. Press the [RIGHT ARROW] or [LEFT ARROW] key to scroll through the other setup menus to review or alter the current settings.

Using the TrustedCore Menu

When the Fujitsu logo appears on the screen. press the [Enter] key or click on the left mouse or touchpad button; the TrustedCore Menu will appear.

The TrustedCore Menu provides shortcuts to the following menus and information screens:

- BIOS Setup
- Diagnostic Screen
- Boot Menu
- Patent Information
- System Information
- Continue Booting

Clicking on any of the fields will invoke the screen, information, or action described.

The Boot Menu can also be invoked by pressing the [F12] key when the Fujitsu logo appears on the screen.

Navigating through the Setup Utility

The BIOS setup utility consists of six menus: Main, Advanced, Security, Boot, Info, and Exit. This document explains each menu in turn, including all submenus and setup items.

The following procedures allow you to navigate the setup utility menus:

1. To select a menu, use the cursor keys: [←], [→].
2. To select a field within a menu or a submenu, use the cursor keys: [↑], [↓].
3. To select the different values for each field, press the [Spacebar] or [+] to change to the next lower selection and [F5] or [-] to go to the next higher selection.
4. To activate a submenu press the [Enter] key.
5. To return to a menu from a submenu, press the [Esc] key.
6. To go to the Exit menu from any other menu, press the [Esc] key.

- Selecting a field causes a help message about that field to be displayed on the right-hand side of the screen.
- Pressing the Enter key with the highlight on a selection that is not a submenu or auto selection will cause a list of all options for that item to be displayed. Pressing the Enter key again will select the highlighted choice.

7. Pressing the [F9] key resets all items in the BIOS to the default values.
8. Pressing the [F10] key saves the current configuration and exits the BIOS Setup Utility. You will be asked to verify this selection before it is executed.
9. Pressing the [F1] key gives you a general help screen.

Entering the Setup Utility After a Configuration Change or System Failure

If there has been a change in the system configuration that does not agree with the parameter settings stored in your BIOS memory, or there is a failure in the system, the system beeps and/or displays an error message after the Power On Self Test (POST). If the failure is not too severe, it will give you an opportunity to modify the setup utility settings, as described in the following steps:

1. When you turn on or restart the computer there is a beep and/or the following message appears on the screen:

   ```
   Error message - please run SETUP
   program Press <F1> key to continue,
   <F2> to run SETUP
   ```

2. If an error message is displayed on the screen, and you want to continue with the boot process and start the operating system anyway, press the [F1] key.

- If your notebook emits a series of beeps that sounds like a code and the display is blank, please refer to the Troubleshooting Section in the system User's Guide. The Troubleshooting Section includes a list of error messages and their meanings.
- If your data security settings require it, you may be asked for a password before the operating system will be opened.

3. If an error message is displayed on the screen, and you want to enter the setup utility, press the [F2] key.
4. When the setup utility starts with a fault present, the system displays the following message:

   ```
   Warning!
   Error message
   [Continue]
   ```

5. Press any key to enter the setup utility. The system will then display the Main Menu with current parameters values.

MAIN MENU - SETTING STANDARD SYSTEM PARAMETERS

The Main Menu allows you to set or view the current system parameters. Follow the instructions for Navigating through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Main menu and its submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

System Time and System Date can also be set from your operating system without using the setup utility. Use the calendar and time icon on your Windows Control Panel.

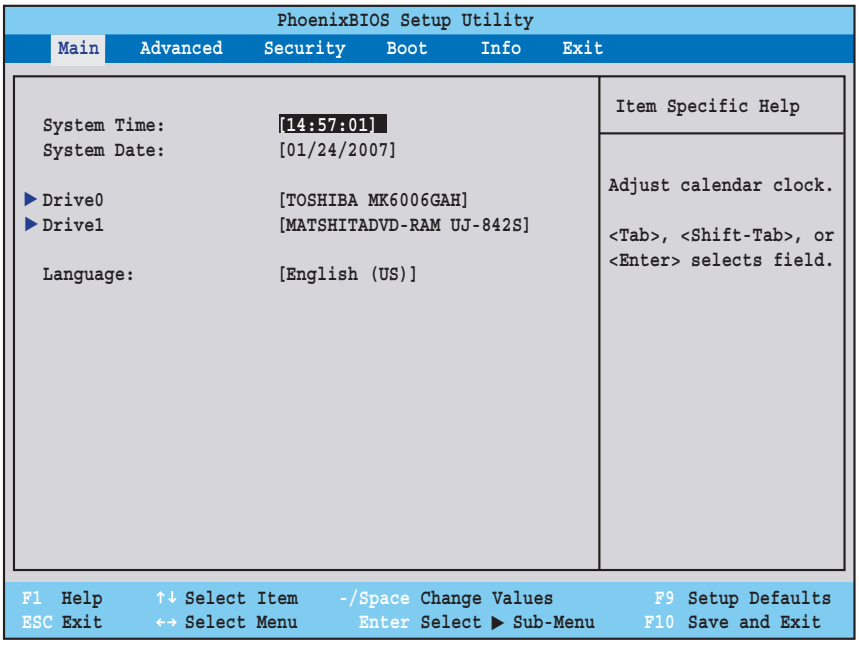
PhoenixBIOS Setup Utility
Main Advanced Security Boot Info Exit
System Time: [14:57:01]
System Date: [01/24/2007]
Drive0 [TOSHIBA MK6006GAH]
Drive1 [MATSHITADVD-RAM UJ-842S]
Language: [English (US)]
Item Specific Help
Adjust calendar clock.
<Tab>, <Shift-Tab>, or <Enter> selects field.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 1. Main Menu

Menu Field	Options	Default	Description
System Time:	—	—	Sets and displays the current time. Time is in a 24 hour format of hours:minutes:seconds with 2 digits for each. (HH:MM:SS). Example: 16:45:57. You may change each segment of the time separately. Move between the segments with the [**Tab**] key and/or [**Shift**] + [**Tab**] keys.
System Date:	—	—	Sets and displays the current date. Date is in a month/day/year numeric format with 2 digits each for month and day and 4 digits for year. (MM/DD/YYYY) for example: 12/20/2006. You may change each segment of the date separately. Move between the segments with the [**Tab**] key and/or [**Shift**] + [**Tab**] keys.

Menu Field	Options	Default	Description
Drive0:	Selects the Drive0 Serial ATA drive submenu	The product number of the hard drive.	Displays the type of device on this ATA/ATAPI interface, if there is one. Pressing the Enter key selects the Primary Master submenu allowing additional device configuration options for this interface.
Drive1:	Selects the Drive1 Serial ATA drive submenu	The product number of the CD-ROM drive.	Displays the type of ATA/IDE device on this ATA/ATAPI interface, if there is one. Pressing the Enter key selects the Serial ATA Port 0 submenu allowing additional device configuration options for this interface.
Language:	■ English (US) ■ Japanese (JP)	[English (US)]	The default setting differs between the US/European and the Japanese model. Selects the display language for the BIOS.

Drive0 Submenu of the Main Menu

The Drive0 submenu identifies which ATA devices are installed.

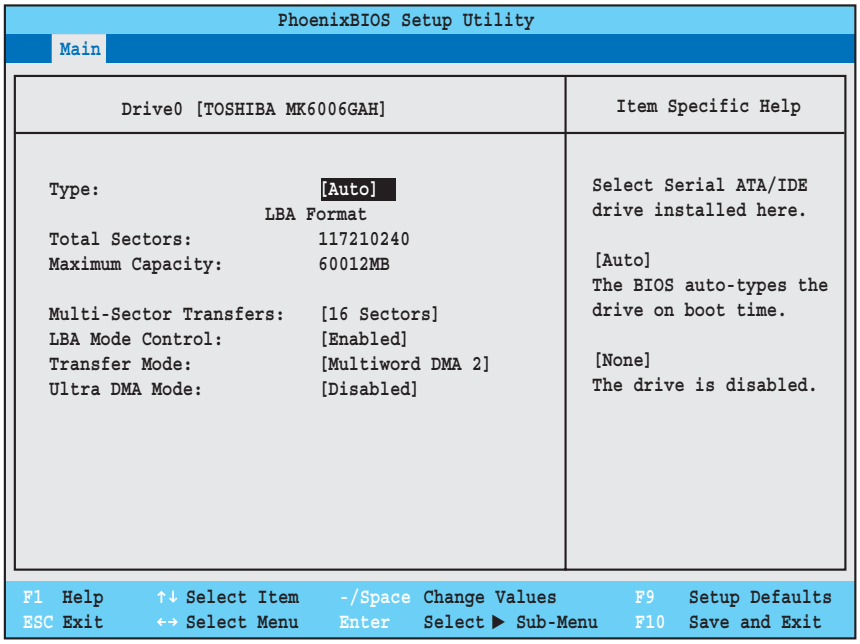
PhoenixBIOS Setup Utility
Main
Drive0 [TOSHIBA MK6006GAH]
Item Specific Help
Type: [Auto]
LBA Format
Total Sectors: 117210240
Maximum Capacity: 60012MB
Multi-Sector Transfers: [16 Sectors]
LBA Mode Control: [Enabled]
Transfer Mode: [Multiword DMA 2]
Ultra DMA Mode: [Disabled]
Select Serial ATA/IDE drive installed here.
[Auto]
The BIOS auto-types the drive on boot time.
[None]
The drive is disabled.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 2. Drive0 Submenu

Table 2: Fields, Options and Defaults for the Drive0 Submenu of the Main Menu

Menu Field	Options	Default	Description
Type:	▪ Auto ▪ None	[Auto]	Select [Auto] to have the type of Serial or Parallel ATA device automatically identified by the BIOS at POST. If [None] is selected, the following Set-up items do not appear.
LBA Format			**Logical Block Addressing (LBA)**
Total Sectors:	---	---	The total number of sectors on your hard disk. This information is automatically displayed when [Auto] is selected.
Maximum Capacity:	---	---	The maximum capacity of your hard disk. This information is automatically displayed when [Auto] is selected as the Type.
Multi-Sector Transfers:	▪ Disabled ▪ 2 Sectors ▪ 4 Sectors ▪ 8 Sectors ▪ 16 Sectors	[16 Sectors]	This information is automatically selected when [Auto] is selected as the Type.

Table 2: Fields, Options and Defaults for the Drive0 Submenu of the Main Menu

Menu Field	Options	Default	Description
LBA Mode Control:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables logical Block Addressing in place of Cylinder, Head, Sector addressing. This setting is automatically selected when [Auto] is selected as the Type.
Transfer Mode:	▪ Standard ▪ Fast PIO 1 ▪ Fast PIO 2 ▪ Fast PIO 3 ▪ Fast PIO 4 ▪ Multiword DMA 1 ▪ Multiword DMA 2	[Multiword DMA 2]	Selects the method for moving data to/from the drive. This option cannot be changed when Auto is selected and autotypes the drive to select the optimum transfer mode.
Ultra DMA Mode:	▪ Disabled ▪ Mode 0 ▪ Mode 1 ▪ Mode 2 ▪ Mode 3 ▪ Mode 4 ▪ Mode 5	[Disabled]	Selects the method for moving data to/from the drive. This setting is automatically selected when [Auto] is selected and autotypes the drive to select the optimum transfer mode.

- A bootable CD-ROM or DVD-ROM may have a floppy disk or hard drive format. When a bootable CD-ROM or DVD-ROM is used, drive allocations change automatically without changing the BIOS setup. If a floppy disk format CD-ROM or DVD-ROM is used, the disc becomes Drive A. The CD-ROM or DVD-ROM will only take drive C: (hard drive format) if the internal hard drive is not present or is disabled. The bootable CD-ROM or DVD-ROM can never use a C: designation if a formatted internal hard drive is present since the C: designator is always reserved for the internal hard drive. The boot sequence ignores the new drive designations, however, your application software will use the new designations.
- Be careful of the operating environment when booting from CD-ROM/DVD-ROM or you may mistakenly overwrite files.

Drive1 Submenu of the Main Menu

The Drive1 submenu identifies which ATA/IDE devices are installed.

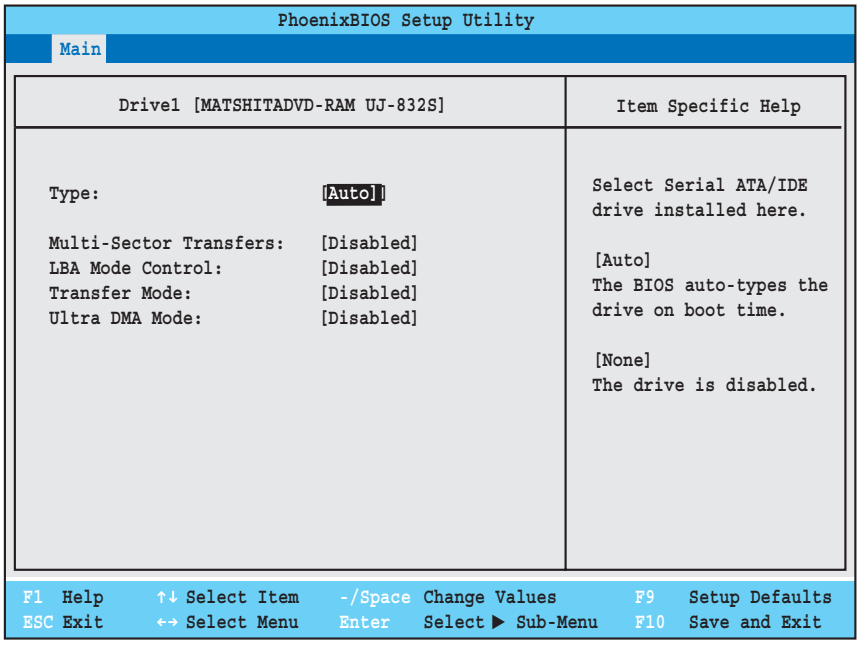
PhoenixBIOS Setup Utility
Main
Drive1 [MATSHITADVD-RAM UJ-832S]
Item Specific Help
Type: [Auto]
Multi-Sector Transfers: [Disabled]
LBA Mode Control: [Disabled]
Transfer Mode: [Disabled]
Ultra DMA Mode: [Disabled]
Select Serial ATA/IDE drive installed here.
[Auto]
The BIOS auto-types the drive on boot time.
[None]
The drive is disabled.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 3. Drive1 Submenu

Menu Field	Options	Default	Description
Type:	▪ Auto ▪ None	[Auto]	NOTE: The Type field does not appear as a drop-down menu. Tap the spacebar to toggle the selections. Selects the ATA/ATAPI device type. Select Auto to have the type automatically identified by the BIOS at POST. If None is selected, all of the following setup items do not appear.
Multi-Sector Transfers:	▪ Disabled ▪ 2 Sectors ▪ 4 Sectors ▪ 8 Sectors ▪ 16 Sectors	[Disabled]	This option cannot be changed (automatically identified by the BIOS). Specifies the number of sectors per block for multiple sector transfer.
LBA Mode Control:	▪ Disabled ▪ Enabled	[Disabled]	Enables or disables Logical Block Addressing in place of Cylinder, Head, Sector addressing. This option cannot be changed (automatically identified by the BIOS).

Menu Field	Options	Default	Description
Transfer Mode:	▪ Standard ▪ Fast PIO 1 ▪ Fast PIO 2 ▪ Fast PIO 3 ▪ Fast PIO 4 ▪ Multiword DMA 1 ▪ Multiword DMA 2	Standard	Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode. This option cannot be changed (automatically identified by the BIOS). Multi-word DMA is automatically set to mode 1 for Fast PIO 1, Fast PIO 2, Fast PIO 3, and set to mode 2 for Fast PIO 4 / DMA.
Ultra DMA Mode:	▪ Disabled ▪ Mode 0 ▪ Mode 1 ▪ Mode 2 ▪ Mode 3 ▪ Mode 4 ▪ Mode 5	[Disabled]	Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode. This option cannot be changed (automatically identified by the BIOS).

Exiting from Main Menu

When you have finished setting the parameters on this menu, you can either exit from the setup utility, or move to another menu. If you wish to exit from the setup utility, press the [Esc] key or use the cursor keys to go to the Exit menu. If you wish to move to another menu, use the cursor keys.

ADVANCED MENU - SETTING DEVICE FEATURE CONTROLS

The Advanced Menu allows you to:

- Select between the display panel and an external CRT display.
- Enable or disable compensation for your display.
- Configure CPU and USB features.
- Configure Miscellaneous features

The following tables show the names of the menu fields for the Advanced Menu and its submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

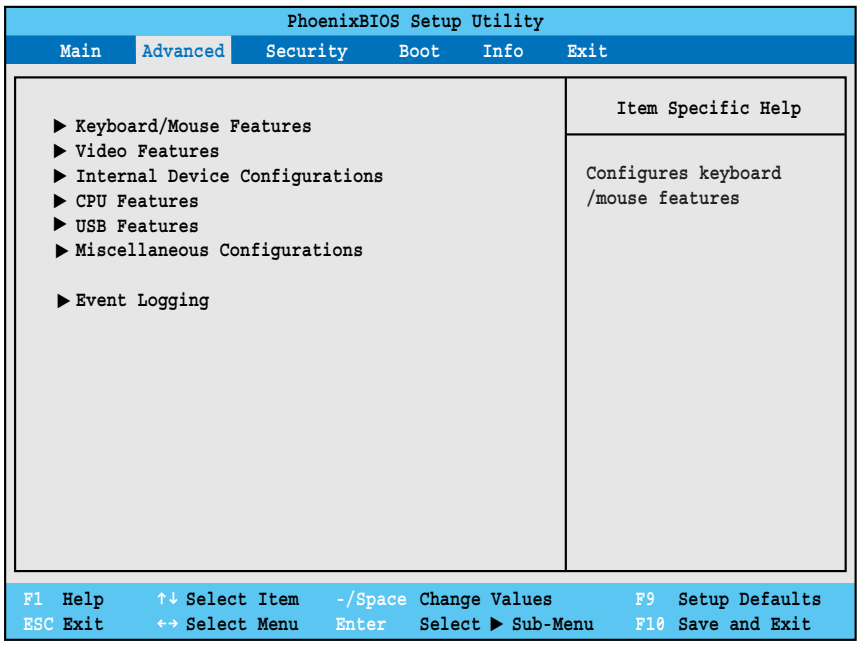

Figure 4. Advanced Menu

Table 4: Fields, Options and Defaults for the Advanced Menu

Menu Field	Description
Keyboard/Mouse Features	When selected, opens the Keyboard/Mouse Features submenu, which allows setting NumLock to Off, On, or On/Padlock Off.
Video Features	When selected, opens the Video Features submenu, which allows setting of the display parameters, including routing of video signals to different displays.
Internal Device Configurations	When selected, opens the Internal Device Configurations submenu, which allows enabling or disabling the IDE, LAN, and modem controllers.
CPU Features	When selected, opens the CPU Features submenu, which allows configuration of Intel SpeedStep Technology performance features and enables or disable XD Bit functionality.
USB Features	When selected, opens the USB Features submenu, which allows enabling or disabling USB and SCSI Subclass support.

Table 4: Fields, Options and Defaults for the Advanced Menu

Menu Field	Description
Miscellaneous Configurations	When selected, opens the Miscellaneous Configurations submenu, which allows you to change the power button, Wake Up On LAN, Volume settings, video memory size, hardware power management, and power-on LED illumination.
Event Logging	When selected, opens the Event Logging submenu which lets you view and enable the event log.

Keyboard/Mouse Features Submenu of the Advanced Menu

The Keyboard/Mouse Features submenu is for setting the condition of the NumLock button.

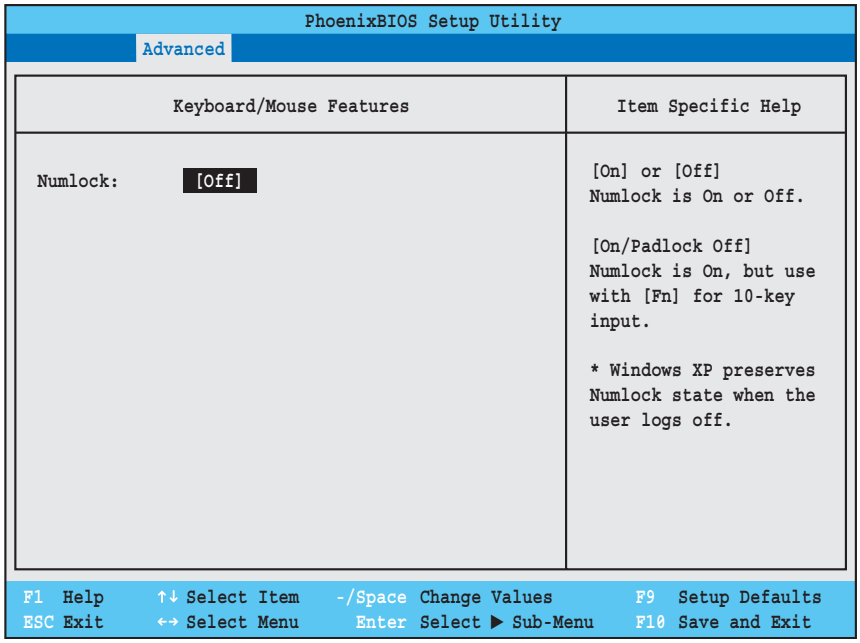
PhoenixBIOS Setup Utility
Advanced
Keyboard/Mouse Features
Item Specific Help
Numlock: [Off]
[On] or [Off]
Numlock is On or Off.
[On/Padlock Off]
Numlock is On, but use with [Fn] for 10-key input.
* Windows XP preserves Numlock state when the user logs off.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 5. Keyboard/Mouse Features Submenu

Table 5: Fields, Options and Defaults for the Keyboard/Mouse Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Numlock:	▪ On ▪ Off ▪ On/Padlock Off	[Off]	Sets the NumLock function state when the computer completes booting.

Video Features Submenu of the Advanced Menu

The Video Features Submenu is for setting the display parameters.

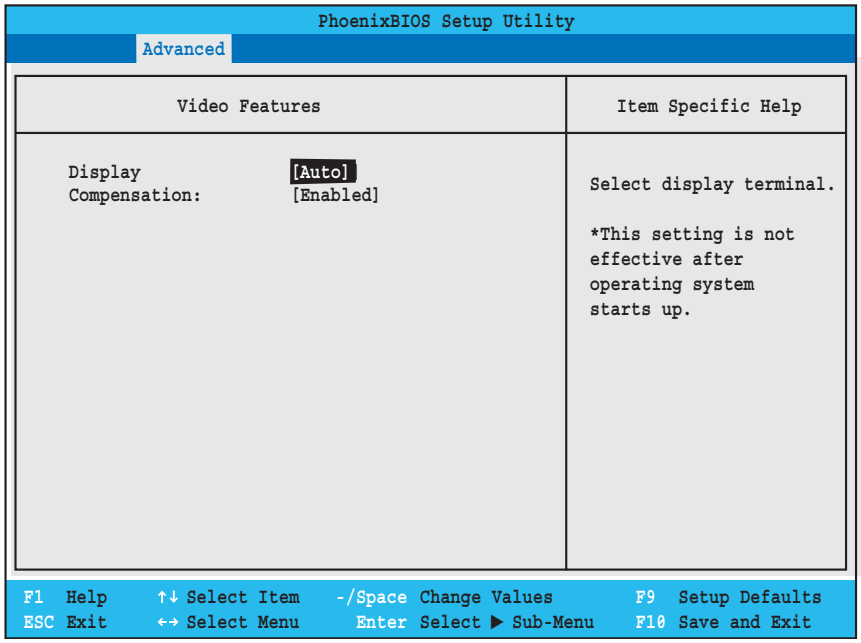
PhoenixBIOS Setup Utility
Advanced
Video Features
Item Specific Help
Display [Auto]
Compensation: [Enabled]
Select display terminal.
*This setting is not effective after operating system starts up.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 6. Video Features Submenu

Table 6: Fields, Options and Defaults for the Video Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Display:	▪ Internal Flat-Panel ▪ External ▪ Auto	[Auto]	Selects where the video signal will be routed. Note that once the system boots up, the settings for the Windows video driver take precedence over this setting.
Compensation:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables compensation which controls spacing on the display. When enabled, displays with less than pixel resolution 800 x 600 will still cover the entire screen.

Internal Device Configurations Submenu of the Advanced Menu

The Internal Device Configurations submenu allows the user to configure other internal devices.

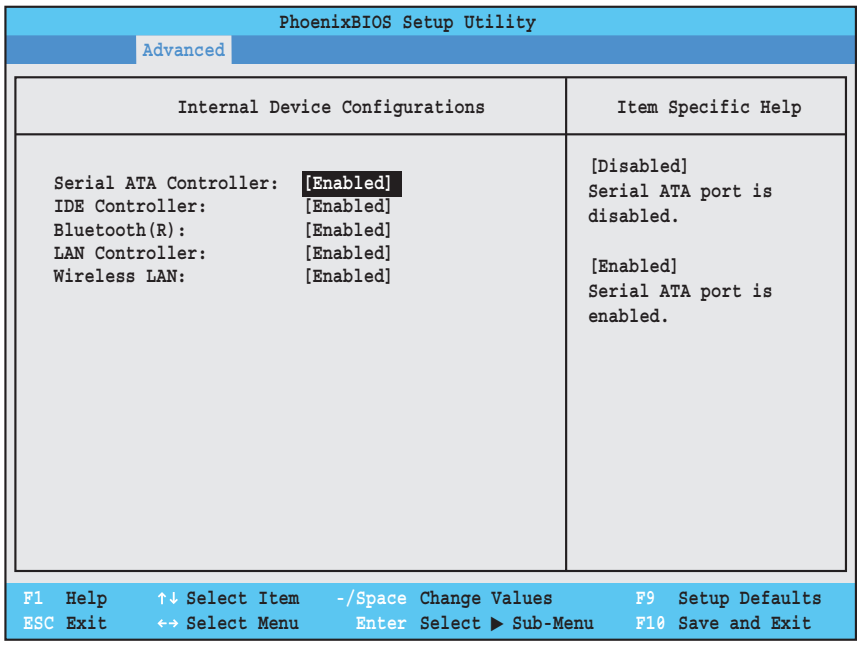
PhoenixBIOS Setup Utility
Advanced
Internal Device Configurations
Item Specific Help
Serial ATA Controller: [Enabled]
IDE Controller: [Enabled]
Bluetooth(R): [Enabled]
LAN Controller: [Enabled]
Wireless LAN: [Enabled]
[Disabled]
Serial ATA port is disabled.
[Enabled]
Serial ATA port is enabled.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 7. Internal Device Configurations Submenu

Table 7: Fields, Options and Defaults for the Internal Device Configurations Submenu of Advanced Menu

Menu Field	Options	Default	Description
Serial ATA Controller:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables serial ATA devices.
IDE Controller:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables selected IDE devices.
Bluetooth(R):	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables the Bluetooth(R) device.
LAN Controller:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables LAN controller.
Wireless LAN:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables the wireless LAN device.

CPU Features Submenu of the Advanced Menu

The CPU Features submenu configures certain features of the CPU in the system.

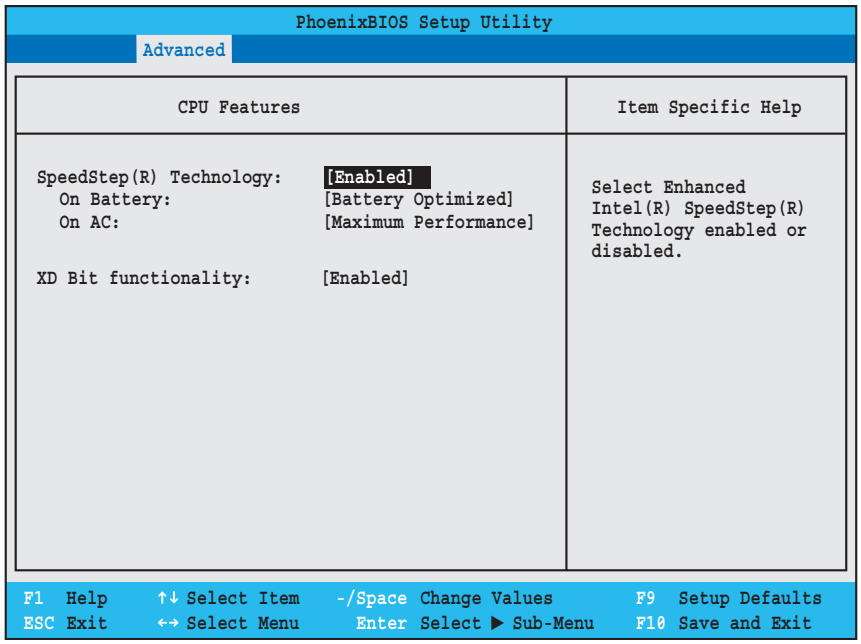
PhoenixBIOS Setup Utility
Advanced
CPU Features
Item Specific Help
SpeedStep(R) Technology: [Enabled]
On Battery: [Battery Optimized]
On AC: [Maximum Performance]
XD Bit functionality: [Enabled]
Select Enhanced Intel(R) SpeedStep(R) Technology enabled or disabled.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 8. CPU Features Submenu

Table 8: Fields, Options and Defaults for the CPU Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
SpeedStep(R) Technology:	▪ Disabled ▪ Enabled	[Enabled]	Enables or disables SpeedStep(R) Technology.
On Battery:	▪ Maximum Performance ▪ Battery Optimized ▪ Automatic	[Battery Optimized]	Allows the user to select the power conditions when the system is running on battery power.
On AC:	▪ Maximum Performance ▪ Battery Optimized ▪ Automatic	[Maximum Performance]	Allows the user to select the power conditions when the system is running on AC power.
XD Bit functionality:	▪ Enabled ▪ Disabled	[Enabled]	Allows the user to enable and disable the Execute Disable Bit functionality. Execute Disable Bit allows the processor to classify areas in memory where application code can and cannot execute. In the event an internet worm attempts to insert code in the buffer, the processor disables code execution to prevent damage or worm propagation.

USB Features Submenu of the Advanced Menu

The USB Features submenu configures the USB capabilities of the system.

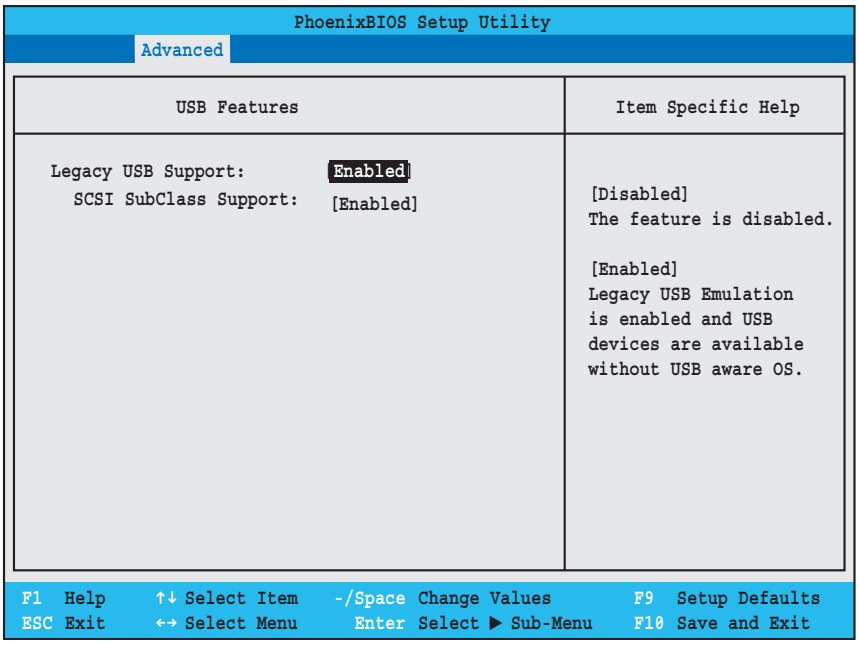
PhoenixBIOS Setup Utility
Advanced
USB Features
Item Specific Help
Legacy USB Support: Enabled
SCSI SubClass Support: [Enabled]
[Disabled]
The feature is disabled.
[Enabled]
Legacy USB Emulation is enabled and USB devices are available without USB aware OS.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 9. USB Features Submenu

Table 9: Fields, Options and Defaults for the USB Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Legacy USB Support:	▪ Disabled ▪ Enabled	[Enabled]	When Disabled is selected, legacy USB emulation is disabled. When Enabled is selected, legacy USB emulation is enabled and USB devices are available without USB-aware OS.
SCSI SubClass Support:	▪ Disabled ▪ Enabled	[Enabled]	When Enabled is selected, USB devices that belong to the SCSI subclass in the mass storage class (e.g., USB Memory Key) are enabled. Note that enabling this feature may cause the system to hang during POST, depending on the device that is connected.

Miscellaneous Configurations Submenu of the Advanced Menu

The CPU Features submenu configures certain features of the CPU in the system.

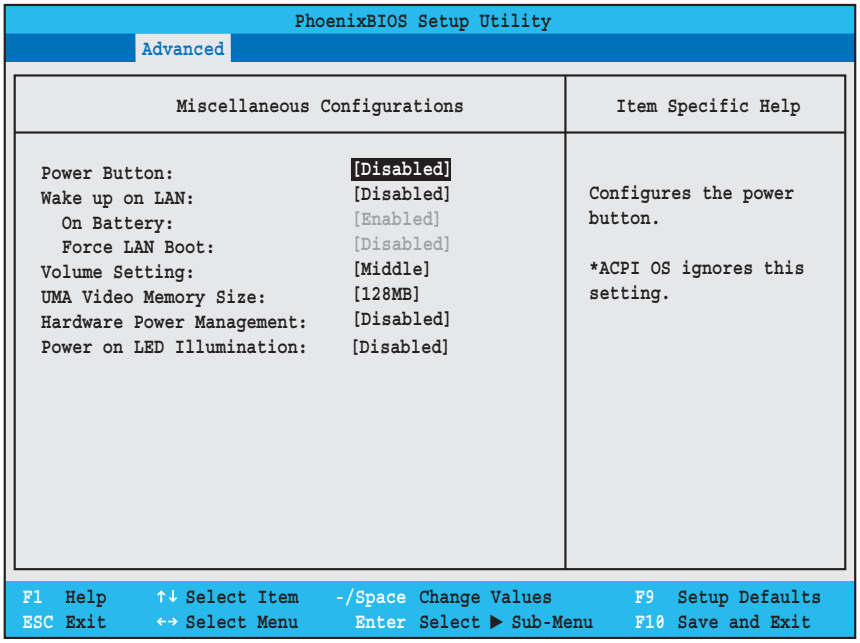
PhoenixBIOS Setup Utility
Advanced
Miscellaneous Configurations
Item Specific Help
Power Button: [Disabled]
Wake up on LAN: [Disabled]
On Battery: [Enabled]
Force LAN Boot: [Disabled]
Volume Setting: [Middle]
UMA Video Memory Size: [128MB]
Hardware Power Management: [Disabled]
Power on LED Illumination: [Disabled]
Configures the power button.
*ACPI OS ignores this setting.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 10. Miscellaneous Configurations Submenu

Table 10: Fields, Options and Defaults for the Miscellaneous Configurations Submenu

Menu Field	Options	Default	Description
Power Button:	▪ Disabled ▪ Power Off	[Disabled]	Selecting Disabled disables the power button. Selecting Power Off allows you to turn off system power with the power button.
Wake up on LAN:	▪ Disabled ▪ Enabled	[Disabled]	Selecting Enabled allows the system to wake up when the internal LAN device receives a specific signal while in power-off state. Selecting Disabled disables this feature.
Force LAN Boot:	▪ Disabled ▪ Enabled	[Disabled]	This feature is active only when "Wake up on LAN" is enabled. When enabled, in the event of a system wake-up on LAN, the system will try to first boot from the LAN before attempting to boot from any other device, regardless of the BIOS boot priority settings or disabling of the Preboot Execution Environment.
Volume Setting:	▪ Off ▪ Minimum ▪ Middle ▪ Maximum	[Middle]	Selects the initial volume setting for the system.

Table 10: Fields, Options and Defaults for the Miscellaneous Configurations Submenu

Menu Field	Options	Default	Description
UMA Video Memory Size:	▪ 64MB ▪ 128MB ▪ 224MB	[128MB]	Allows you to select the maximum shared video memory size. Video memory is dynamically allocated as needed for running applications by Dynamic Video Memory Technology (DVMT).
Hardware Power Management	▪ Disabled ▪ Enabled	[Enabled]	Allows you to enable or disable the Hardware Power Management feature.
Power on LED Illumination:	▪ Disabled ▪ Enabled	[Disabled]	Allows you to enable or disable the illumination of the LEDs when power is turned on.

Event Logging Submenu of the Advanced Menu

The Event Logging submenu is for setting up the logs for DMI event logging.

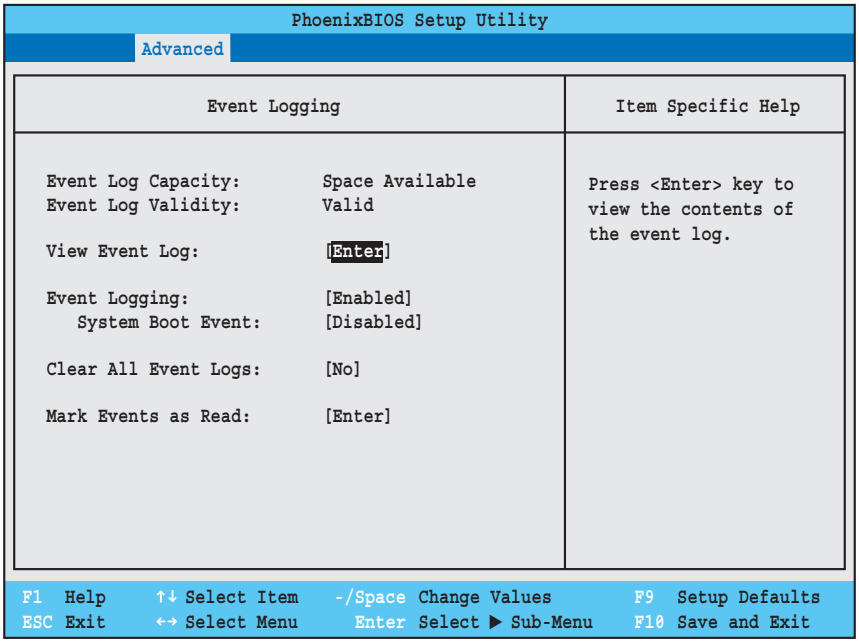
PhoenixBIOS Setup Utility
Advanced
Event Logging
Item Specific Help
Event Log Capacity: Space Available
Event Log Validity: Valid
View Event Log: [Enter]
Event Logging: [Enabled]
System Boot Event: [Disabled]
Clear All Event Logs: [No]
Mark Events as Read: [Enter]
Press <Enter> key to view the contents of the event log.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 11. Event Logging Submenu

Table 11: Fields, Options and Defaults for the Event Logging Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Event Log Capacity:		Space Available	Display only
Event Log Validity:		Valid	Display only
View Event Log:	▪ Enter	[Enter]	Allows you to view content of event log.
Event Logging:	▪ Disabled ▪ Enabled	[Enabled]	Turns event logging on and off for all DMI events.
System Boot Event:	▪ Disabled ▪ Enabled	[Disabled]	Turns event logging on and off for DMI system boot events.
Clear All Event Logs:	▪ No ▪ Yes	[No]	When set to [Yes] all event logs will be cleared at next boot.
Mark Events as Read:	▪ Enter	[Enter]	Allows you to mark events currently in the event log as read.

SECURITY MENU - SETTING THE SECURITY FEATURES

The Security menu allows you to set up the data security features of your notebook to fit your operating needs and to view the current data security configuration. Follow the instructions for Navigating Through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Security menu and its submenus, all the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use. The default condition is no passwords required and no write protection.

Remember your passwords! If you set and forget your User and Master hard disk passwords, Fujitsu Computer Systems service representatives (1-800-8FUJITSU) may not be able to reset it. You may lose data and have to replace your system board or hard disk drive.

- Entering a password incorrectly 3 times in a row causes the keyboard and mouse to be locked out and the warning `[System Disabled]` to be displayed. If this happens, restart the computer by turning off and on the power with the power switch and use the correct password on reboot.
- If you make an error when re-entering the password a `Warning` will display on the screen. To try again press [Enter], then retype the password. Press [Esc] to abort the password setting process.
- If the Power Management Security is Enabled and the Password on Boot is Disabled you will not have to type your password upon resuming the system from the Standby or Hibernate modes. Power Management Security will work only if Password boot is enabled.
- Boot sector protection must be set to `[Normal]` to install or upgrade an operating system.

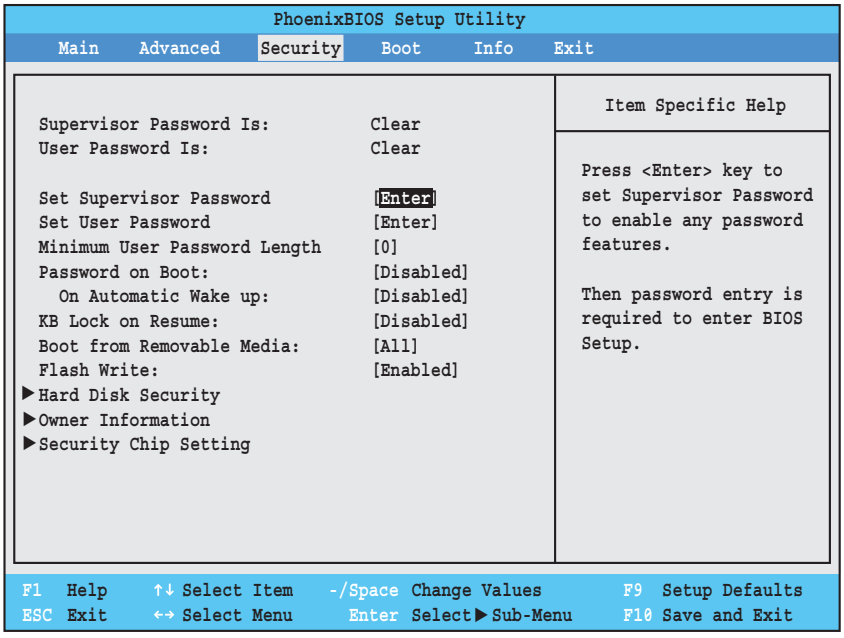
PhoenixBIOS Setup Utility
Main Advanced Security Boot Info Exit
Supervisor Password Is: Clear
User Password Is: Clear
Set Supervisor Password [Enter]
Set User Password [Enter]
Minimum User Password Length [0]
Password on Boot: [Disabled]
On Automatic Wake up: [Disabled]
KB Lock on Resume: [Disabled]
Boot from Removable Media: [All]
Flash Write: [Enabled]
▶Hard Disk Security
▶Owner Information
▶Security Chip Setting
Item Specific Help
Press <Enter> key to set Supervisor Password to enable any password features.
Then password entry is required to enter BIOS Setup.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select▶Sub-Menu F10 Save and Exit

Figure 12. Security Menu

Table 12: Fields, Options and Defaults for the Security Menu

Menu Field	Options	Default	Description
Supervisor Password is:	—	Clear	A display-only field. Set is displayed when the system supervisor password is set and Clear when it is not.
User Password is:	—	Clear	A display-only field. Set is displayed when the general user password is set, and Clear when it is not.
Set Supervisor Password	—	[Enter]	Sets, changes or cancels the Supervisor Password. The Supervisor Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the **Enter** key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a Supervisor Password is set it must be used to access the BIOS setup utility.
Set User Password	—	[Enter]	**Can only be accessed if Supervisor Password is set.** Sets, changes or cancels User Password. User Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the **Enter** key instead of entering characters in the Enter New Password and Re-enter New Password fields. When a User Password is set it must be used to access the BIOS utility.
Minimum User Password Length:	—	[0]	**Can only be accessed if Supervisor Password is set.** Set the minimum length for User Password.
Password on Boot:	▪ Disabled ▪ First Boot ▪ Every Boot	[Disabled]	When set to Disabled, no password is required. When set to First Boot, password entry required only before first boot. When Every Boot is selected, password required whenever the system is booted.
On Automatic Wake-up:	▪ Disabled ▪ Enabled	[Disabled]	When set to Disabled, it is not necessary to enter a password to wake up from LAN or Real Time Clock (RTC). When Enabled, it is still necessary to enter a password after automatic wake-up.
KB Lock on Resume:	▪ Disabled ▪ Enabled	[Disabled]	When Enabled, keyboard or mouse inputs are locked out at Resume From Suspend or Save-to-Disk until entering password.
Boot from Removable Media:	▪ All ▪ Supervisor only	[All]	When Supervisor Only is selected, only the Supervisor can boot from removable media. Only the user who enters the Supervisor Password before OS boot is treated as the Supervisor. When All is selected, boot from removable media is not restricted.
Flash Write:	▪ Disabled ▪ Enabled	[Enabled]	When disabled, the BIOS Flash Memory is write-protected; when enabled, it is not.
Hard Disk Security	—	—	Configures hard disk security features.
Owner Information	—	—	Sets Owner information.
Security Chip Setting	—	—	Sets setting for the security chip.

Exiting from the Security Menu

When you have finished setting the parameters on the Security Menu, you can either exit from setup utility or move to another menu. If you wish to exit from setup utility, press the [Esc] key to go to the Exit Menu. If you wish to move to another menu, use the cursor keys.

Hard Disk Security Submenu of the Security Menu

The Hard Disk Security submenu is for configuring hard disk security features.

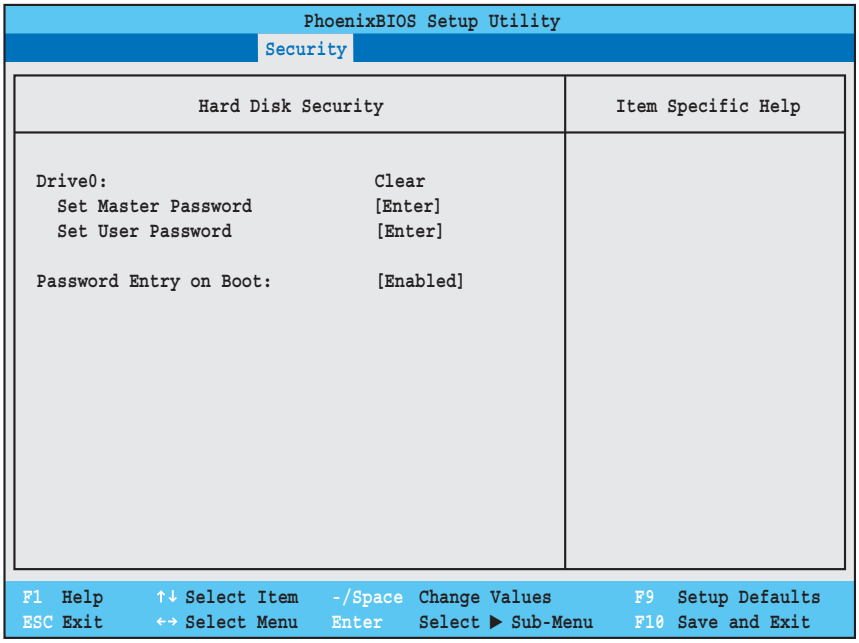
PhoenixBIOS Setup Utility
Security
Hard Disk Security
Item Specific Help
Drive0: Clear
Set Master Password [Enter]
Set User Password [Enter]
Password Entry on Boot: [Enabled]
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 13. Hard Disk Security Submenu

Table 13: Fields, Options and Defaults for the Hard Disk Security Submenu of the Security Menu

Menu Field	Default	Description
Drive0:	Clear	A display-only field. Set is displayed when the Master Password is set and Clear when it is not.
Set Master Password	[Enter]	Sets, changes or cancels Primary Master Password. The Primary Master Password may be up to seven characters long and include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the Enter key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a Primary Master Password is set it must be used to access the hard disk. Data on the hard disk cannot be read on other systems.
Set User Password	[Enter]	Sets, changes or cancels User Password. The User Password may be up to seven characters long and include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the Enter key instead of entering characters in the Enter New Password field and in the Re-enter New Password field.
Password Entry on Boot:	[Enabled]	When set to Disabled, it is not necessary to enter a Hard Disk Password before booting the OS. The hard disk is still password-protected without password entry.

Owner Information Submenu of the Security Menu

The Owner Information submenu is for setting owner information.

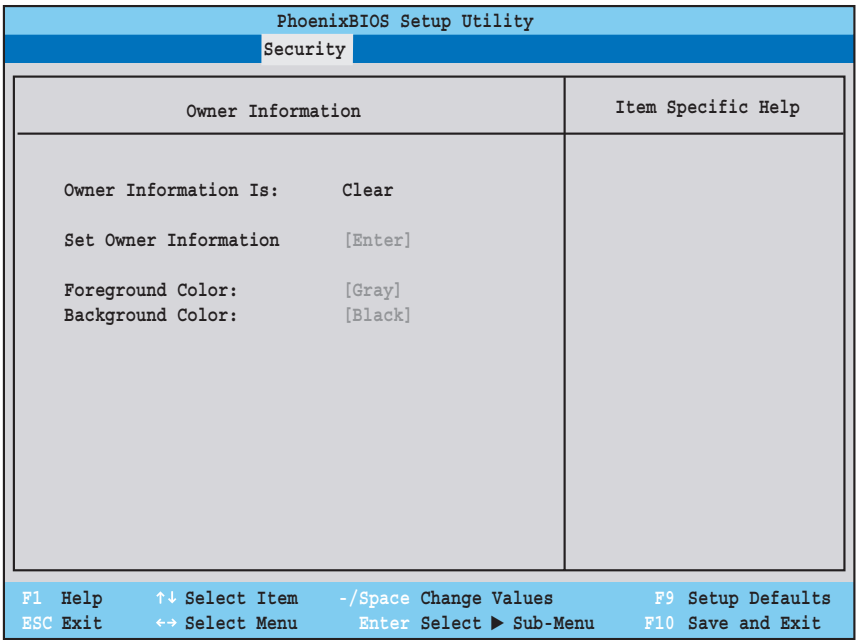
PhoenixBIOS Setup Utility
Security
Owner Information
Item Specific Help
Owner Information Is: Clear
Set Owner Information [Enter]
Foreground Color: [Gray]
Background Color: [Black]
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 14. Owner Information Submenu

Table 14: Fields, Options and Defaults for the Owner Information Submenu of the Security Menu

Menu Field	Options	Default	Description
Owner Information Is:	—	Clear	Display only. (Will only be displayed if the Supervisor Password is set).
Set Owner Information:	—	[Enter]	Field to write owner information, i.e. name.
Foreground Color:	■ Black ■ Blue ■ Green ■ Cyan ■ Red ■ Magenta ■ Brown ■ White ■ Gray ■ Light Blue ■ Light Green ■ Light Cyan ■ Light Red ■ Light Magenta ■ Light Yellow ■ Bright White	[Gray]	
Background Color:	■ Black ■ Blue ■ Green ■ Cyan ■ Red ■ Magenta ■ Brown ■ White ■ Gray ■ Light Blue ■ Light Green ■ Light Cyan ■ Light Red ■ Light Magenta ■ Light Yellow ■ Bright White	[Black]	

Security Chip Setting Submenu of the Security Menu

The Security Chip Setting Submenu is for enabling or disabling the embedded security chip.

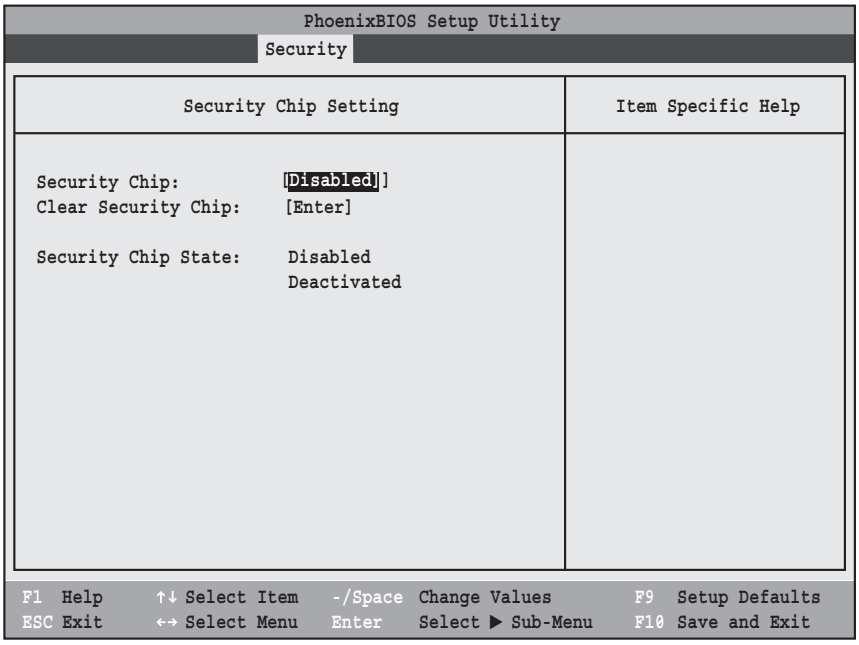
PhoenixBIOS Setup Utility
Security
Security Chip Setting
Item Specific Help
Security Chip: [Disabled]
Clear Security Chip: [Enter]
Security Chip State: Disabled
Deactivated
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 15. Security Chip Setting Submenu

Table 15: Fields, Options and Defaults for the Security Chip Setting Submenu of the Security Menu

Menu Field	Options	Default	Description
Security Chip:	• Disabled • Enabled	[Disabled]	Select to enable or disable the security chip. Note that after configuring the security chip, a system reboot is required.
Clear Security Chip	____	[Enter]	Allows you to clear the security chip. Note that if you clear the security chip, you will not be able to access data that has already been encrypted. This field is **only visible** when Security Chip is [Enabled].
Security Chip State:	____	Disabled Deactivated	Information only. Indicates the current state of the security chip.

BOOT MENU - SELECTING THE OPERATING SYSTEM SOURCE

The Boot Menu is used to select the order in which the BIOS searches sources for the operating system. Follow the instructions for Navigating Through the Setup Utility to make any changes. The tables show the names of the menu fields for the Boot menu and its submenu, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

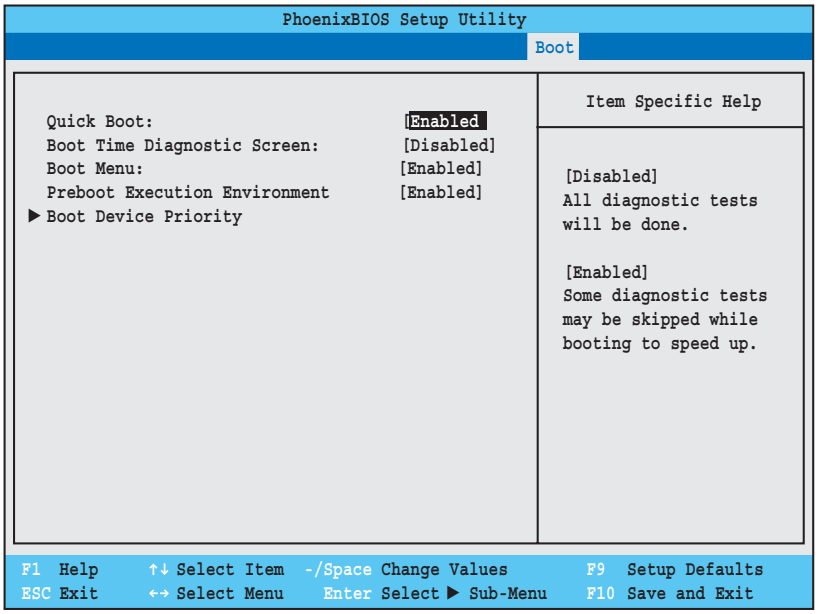
PhoenixBIOS Setup Utility
Boot
Item Specific Help
Quick Boot: [Enabled]
Boot Time Diagnostic Screen: [Disabled]
Boot Menu: [Enabled]
Preboot Execution Environment [Enabled]
▶ Boot Device Priority
[Disabled]
All diagnostic tests will be done.
[Enabled]
Some diagnostic tests may be skipped while booting to speed up.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 16. Boot Menu

Table 16: Fields, Options and Defaults for the Boot Menu

Menu Field	Options	Default	Description
QuickBoot:	▪ Disabled ▪ Enabled	[Enabled]	Turns on and off booting with a truncated set of Power On Self Test. (Fewer tests mean faster turn on.)
Boot-time Diagnostic Screen:	▪ Disabled ▪ Enabled	[Disabled]	Turns on and off display of test results instead of Fujitsu logo screen during Power On Self Test.
Boot Menu:	▪ Disabled ▪ Enabled	[Enabled]	This field is not active unless the Supervisor's Password has been set. When disabled, access to the Boot Menu with the [F12] key is disabled. When enabled, the Boot Menu is enabled and the [F12] key will allow you to display it.
Preboot Execution Environment	▪ Disabled ▪ Enabled	[Enabled]	Turns off and on the preboot execution environment feature.
Boot Device Priority	▪ Selects Boot Device Priority submenu	—	This menu allows setting up the source for the operating system.

Boot Device Priority Submenu of the Boot Menu

The Boot Device Priority submenu is for setting the order of checking of sources for the operating system.

- Be aware of the operating environment when booting from a CD or you may overwrite files by mistake.
- A bootable CD-ROM has either a floppy disk or a hard drive format. When a bootable CD-ROM is used, drive allocations change automatically without changing the BIOS setup. If floppy disk format is used, the CD-ROM becomes Drive A. The CD-ROM will only take drive C: (hard drive format) if the internal hard drive is not present or is disabled. A bootable CD-ROM cannot use a C: designation if a formatted internal hard drive is present since the C: designator is always reserved for the internal hard drive. The boot sequence ignores new drive designations, but your application software will use the new designations.
- In order for a portable USB memory device (e.g., JumpDrive or memory stick) to be recognized in the Boot Device Priority list, it must have been installed before booting the system.
- Note that some older portable USB memory devices may not be recognized as bootable devices.

The Boot Menu can also be invoked outside of the Setup Utility using the TrustedCore menu or the [F12] key. See Using the TrustedCore Menu for more information.

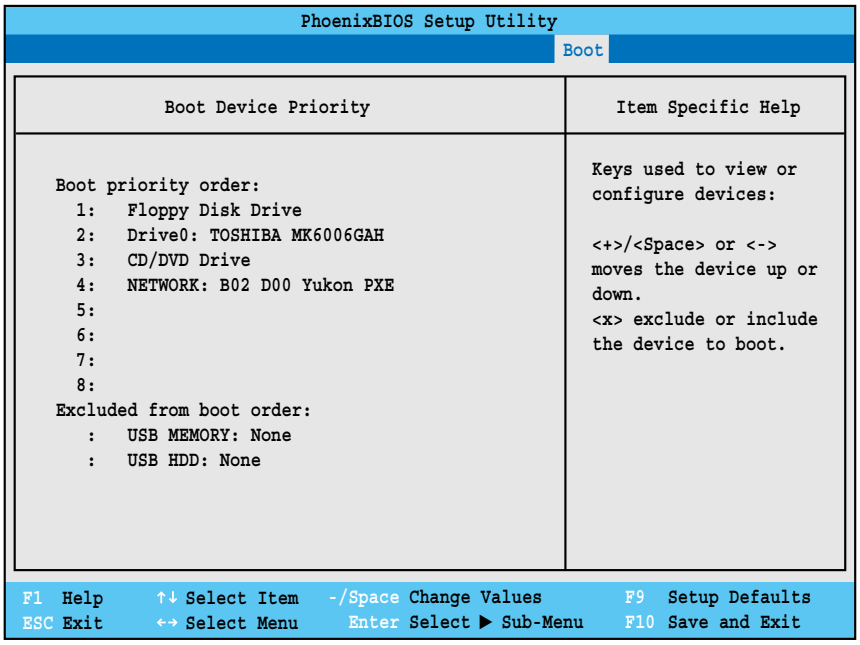
PhoenixBIOS Setup Utility
Boot
Boot Device Priority
Item Specific Help
Boot priority order:
1: Floppy Disk Drive
2: Drive0: TOSHIBA MK6006GAH
3: CD/DVD Drive
4: NETWORK: B02 D00 Yukon PXE
5:
6:
7:
8:
Excluded from boot order:
: USB MEMORY: None
: USB HDD: None
Keys used to view or configure devices:
<+>/<Space> or <-> moves the device up or down.
<x> exclude or include the device to boot.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 17. Boot Device Priority Submenu

Table 17: Fields, Options and Defaults for the Boot Device Priority Submenu of the Boot Menu

Menu Field	Description
Boot priority order: 1: Floppy Disk Drive 2: Drive0: 3: CD/DVD Drive: 4: NETWORK: 5: 6: 7: 8: Excluded from boot order: : USB MEMORY: : USB HDD:	The boot selections determine the order in which the BIOS searches for the operating system during a startup sequence. To change the order, highlight one source by using the [up] or [down] cursor keys and then press the [+] or [-] key to change the order number. Tapping [x] removes from the list a device that is not installed. Tapping [x] on an item in the Excluded list adds the device to the Boot priority list. Be sure to save your changed order when you exit the BIOS setup utility. NOTE: Be aware that if you use the CD-ROM drive as the first boot device, certain files may be overwritten, depending upon your operating environment.

Exiting from Boot Menu

When you have finished setting the boot parameters with the Boot menu, you can either exit from the setup utility or move to another menu. If you wish to exit from the setup utility press the [Esc] key to go to the Exit menu. If you wish to move to another menu, use the cursor keys.

INFO MENU - DISPLAYS BASIC SYSTEM INFORMATION

The Info menu is a display-only screen that provides the configuration information for your notebook.

The following table shows the names of the menu fields for the Info menu and the information displayed in those fields. These fields are for information purposes only, and are not editable.

The information displayed on this screen is variable according to the unit you purchased.

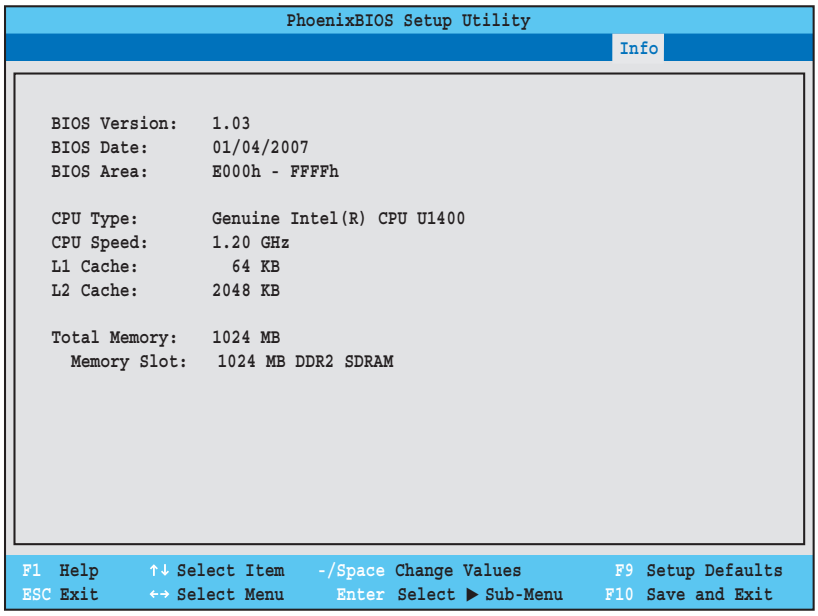
PhoenixBIOS Setup Utility
Info
BIOS Version: 1.03
BIOS Date: 01/04/2007
BIOS Area: E000h - FFFFh
CPU Type: Genuine Intel(R) CPU U1400
CPU Speed: 1.20 GHz
L1 Cache: 64 KB
L2 Cache: 2048 KB
Total Memory: 1024 MB
Memory Slot: 1024 MB DDR2 SDRAM
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 18. Info Menu

Table 18: Fields, Options and Defaults for None

Menu Field	Default	Menu Field	Default
BIOS Version:	1.xx	L1 Cache:	64 KB
BIOS Date:	mm/dd/yyyy	L2 Cache:	2048 KB
BIOS Area:	E000h – FFFFh	Total Memory:	1024 MB
CPU Type:	Genuine Intel(R) CPU U1400	Memory Slot:	1024 MB DDR2 SDRAM
CPU Speed:	1.20 GHz		

EXIT MENU - LEAVING THE SETUP UTILITY

The Exit Menu is used to leave the setup utility. Follow the instructions for Navigating through the Setup Utility to make any changes. The table shows the names of the menu fields for the Exit menu and a description of the field's function and any special information needed to help understand the field's use.

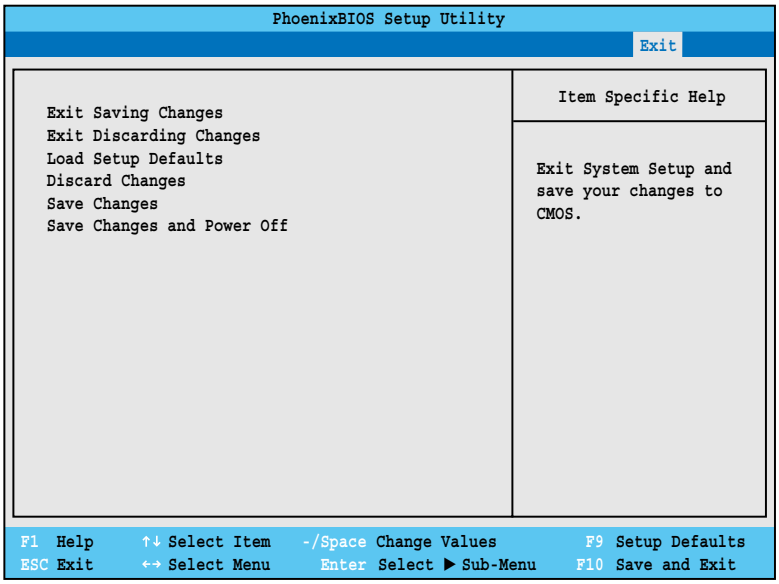

Figure 19. Exit Menu

Table 19: Fields, Options and Defaults for the Exit Menu

Menu Field	Shortcut	Description
Exit Saving Changes	Press the F10 key	Exit Saving Changes and Exit will store all the entries on every menu of the setup utility to the BIOS memory and then exit the setup utility. A confirmation message Save Configuration changes and exit now? [Yes] [No] will be displayed.
Exit Discarding Changes	——	Selecting Exit Discarding Changes and Exit will exit the setup utility with out writing to the BIOS memory. When the BIOS recognizes this selection it will load the operating system and begin operation.
Load Setup Defaults	Press the F9 key	Selecting Load Setup Defaults will load the factory preset default values for all menu fields, then display the message Load default configuration now? [Yes] [No]. When confirmed the setup utility will return to the Exit Menu.
Discard Changes	——	Selecting Discard Changes will load the previous values in BIOS memory for all menu fields. The message Load previous now? [Yes] [No] will be displayed. When confirmed the setup utility will return to the Exit menu.
Save Changes	——	Selecting Save Changes will cause the new settings in all menus to be written to the BIOS memory. The message Save configuration changes now? [Yes] [No] will be displayed. When confirmed, the setup utility will return to the Exit menu.
Save Changes and Power Off	——	Selecting Save Changes and Power Off will cause the new settings in all menus to be written to the BIOS memory, then power the system off. The message `Save configuration changes now and power off?` will be displayed. When confirmed, the setup utility shut down the system.